## CLAIMS

WHAT IS CLAIMED

1. A method of limiting reactive torque transmitted from a set of driven traction wheels to a powertrain during a sudden braking event, comprising:

slipping a drive connection between the traction wheels and the powertrain when the sudden braking event commences, to thereby limit the amount of torque transmitted from the traction wheels to the powertrain.

2. The method of claim 1, further comprising presetting a reactive torque value at which the drive connection begins to slip.

3. The method of claim 1, wherein the slipping step comprises slipping a plurality of clutch plates when the reactive torque reaches a preset torque value.

4. The method of claim 2, wherein the slipping step comprises slipping a plurality of clutch plates when the reactive torque reaches the preset torque value.

5. The method of claim 1, wherein the slipping step is commenced in direct response to reactive torque applied to the drive component.

6. The method of claim 1, wherein the slipping step comprises using a slip clutch.

7. The method of claim 1, further comprising:

determining that a sudden braking event is about to occur;

setting the slip level of the drive component to a first reactive torque value allowing a first level of reactive torque to be transmitted from the wheels to the powertrain; and,

setting a slip level of the drive component to a second reactive torque value when it has been determined that a sudden braking event is about to occur.

8. The method of claim 7, further comprising, after setting the slip level to a second reactive torque level, resetting the slip level of the drive component to the first level of torque.

9. The method of claim 9, the slipping step comprises interposing a slip clutch between the wheels and the powertrain.

10. A method for controlling a hybrid vehicle powertrain system during a sudden braking event in which reactive torque is produced by braking the vehicle's wheels, comprising the step of limiting the amount of reactive torque transmitted from the wheels to the powertrain.

11. The method of claim 10, wherein the torque-limiting step is performed by slipping a clutch connecting the wheels with the powertrain.

12. The method of claim 11, wherein the torque limiting step comprises setting the torque level at which the clutch begins to slip.

13. A method for controlling a hybrid vehicle powertrain system during a sudden braking event in which excessive driveline torque is produced by rapidly braking the vehicle's wheels, comprising the steps of:

transmitting negative torque from the wheels through the driveline component to the powertrain during normal driving conditions;

limiting the amount of torque transmitted from the wheels through the driveline component to the powertrain during a sudden braking event.

14. The method of claim 13, wherein:

the transmitting and limiting steps are respectively comprise transmitting the positive and negative torques through a clutch, and

the limiting step further comprises slipping the clutch when the amount of torque reaches a preselected value.

15. The method of claim 14, wherein the limiting step comprises adjusting the clutch to slip in response to torque equal to or greater than the preselected value.

16. A drive system for a vehicle, comprising:

a powertrain including at least one electric drive motor,

at least one traction wheel; and,

a driveline including a slip clutch, connecting the powertrain with the drive wheel, the slip clutch transmitting positive torque from the powertrain to the drive wheel during normal driving conditions but

allowing slipping during a sudden braking event to limit the amount of torque transmitted from the drive wheel to the powertrain caused by braking force applied to the drive wheel.

17. The drive system of claim 16, wherein the slip clutch includes a plurality of friction plates and springs for biasing the plates into engagement with each other.

18. The drive system of claim 17, wherein the biasing force of the springs is adjustable.

19. The drive system of claim 17, further comprising a sensor for sensing the commencement of a sudden braking event, and a controller responsive to the sensor for adjusting the biasing force of the springs whereby to adjust the amount of torque transmitted from the wheels to the powertrain.

20. A hybrid vehicle drive system, comprising:

an internal combustion engine;

an electric drive motor;

at least one traction wheel;

a driveline connecting the traction wheel with the combination of the internal combustion engine and the electric drive motor;

a vehicle braking system for applying a brake force to the traction wheel during a braking event; and,

a control system including a slip clutch for controlling the torque transmitted from the traction wheel through the driveline during a sudden braking event.

21. The drive system of claim 20, wherein the slip clutch includes a plurality of clutch plates and springs for biasing the plates into engagement with each other.

22. The drive system of claim 20, wherein the amount of torque transmitted by the slip clutch from the drive wheel to the driveline is adjustable.

23. The drive system of claim 22, wherein the control system comprises:

at least one sensor producing a signal indicting the occurrence of a sudden braking event, and

a controller automatically responsive to the sensor signal for adjusting the slip clutch.